EPN Series IP Speed Dome

EPN4220d/4220di

Quick Installation Guide

eZ Tracker

EverFocus®

Copyright © EverFocus Electronics Corp,

Release Date: August, 2014

1. Overview

The EPN series IP Speed Dome comes in two types: **Indoor** (EPN4220di) and **Outdoor** (EPN4220d).

Packing List

The main box contains 3 large boxes and a small box. Each box contains the items as listed below. Please check that there is no missing item in the package before installing.

- **Box 1:** Top housing with a network connector and tool packet
  - Tool packet (Indoor only): Includes 6 Plastic Anchors and 6 Screws.
- **Box 2:** Camera main body with a tool packet
  - Tool packet: Includes 1 pair of Gloves, 3 Desiccant Packs and 1 Power Terminal Block.
- **Box 3:** Outer housing
- **Small Box:** Power adapter
- **Software CD**
- **Quick Installation Guide**

Note:

1. Equipment configurations and supplied accessories vary by country. Please consult your local EverFocus office or agents for more information. Please also keep the shipping carton for possible future use.
2. Contact the shipper if any items appear to have been damaged in the shipping process.

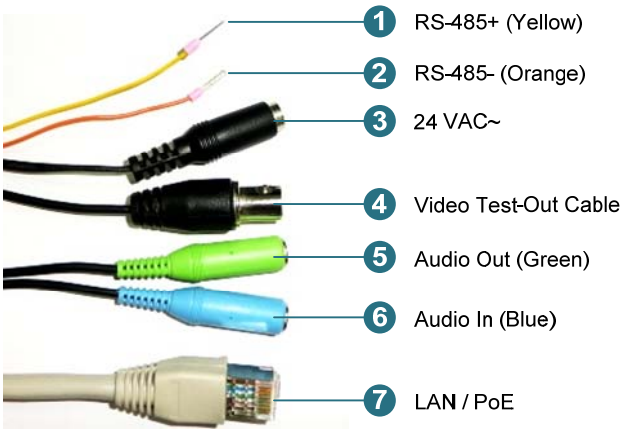
2. System Requirement

Before installing, please check that your computer meets this system requirement.

- Operating System: Microsoft Windows XP / Vista (32-bit) / 7 (32-bit)
- Microsoft Internet Explorer 7 or above

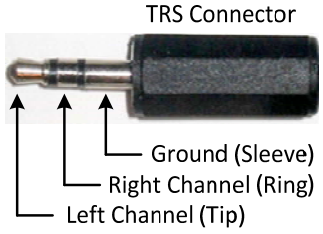
3. Cables and I/O Terminal Block

Cable Descriptions

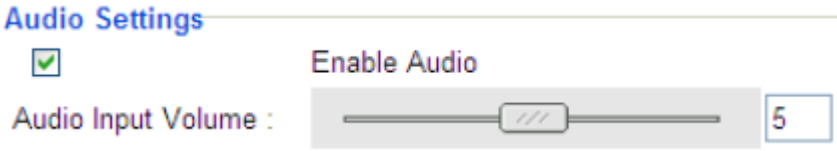


No	Name and Descriptions	No	Name and Descriptions
1	**RS-485+:** Connects to an RS-485 device.	5	**Audio Out:** Connects to a speaker.
2	**RS-485-:** Connects to an RS-485 device.	6	**Audio In:** Connects to a microphone.
3	**24 VAC~:** Connects to the power adapter.	7	**LAN/PoE:** Connects to a 10/100 Ethernet or PoE.
4	**Video Test-Out Cable:** Connects to a DVR or monitor.		
Note: Microphones with external power supplies are required.			

Note that the audio in/out cables feature line 3.5mm jack (TRS). Be sure to prepare speakers / microphones with TRS connector (see TRS Connector image below). Also, speakers / microphones with a (built-in) amplifier and external power supply are required.

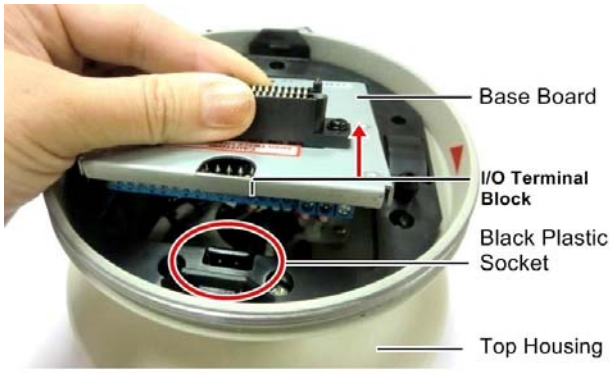


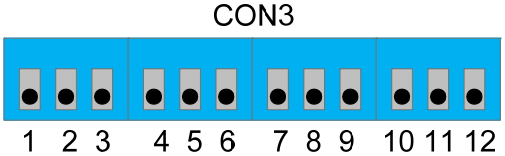
To activate the Audio function, the **Enable Audio** must be checked. See *7.6 Audio* in the *User's Manual*.



I/O Terminal Block

The I/O terminal block, located on the rear panel of the Base Board, can be used to develop applications for alarm input and output, motion detection, PTZ control or a variety of other functions.





Pin Assignment

No.	Functions		No.	Functions	
1	GND (-)		8	Alarm In 1	GND (-)
2	Alarm Out B	NO (+)	9		Alarm In (+)
3		COM (-)	10	Alarm In 2	GND (-)
4		NC (+)	11		Alarm In (+)
5	Alarm Out A	NO (+)	12	GND (-)	
6		COM (-)			
7		NC (+)			

4. Optional Accessories

- EPTZ-PBOX (External power connection box)

- Corner mount adapter

- Pole mount adapter

- Indoor ceiling pendant mount bracket

- Outdoor sunshield

- Indoor recessed mount bracket

- Wall mount bracket

- Indoor concrete ceiling mount adapter

- EKB500 (RS-485 keyboard)

- EKB200 (USB controller keyboard)

5. Installation

This installation guide provides the basic instructions on installing an EPN series IP camera. For details, refer to the *EPN Series IP Speed Dome User's Manual* in the software CD.

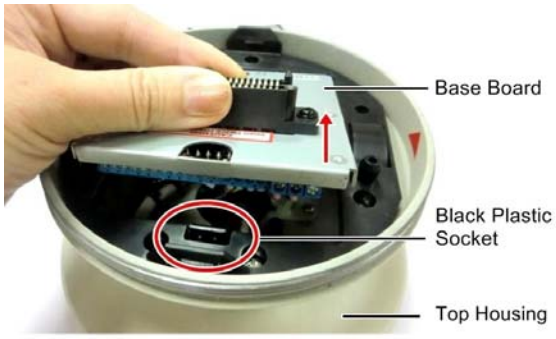
Note: Installation should be handled by a qualified service agent and complied with all local regulations.

Replacing the Desiccant Bags / Inserting a Micro SD Card

Before installing, insert a micro SD card into the main body and replace the desiccant bags inside the top housing. It is highly recommended to replace the desiccant bags every time when you open the camera.

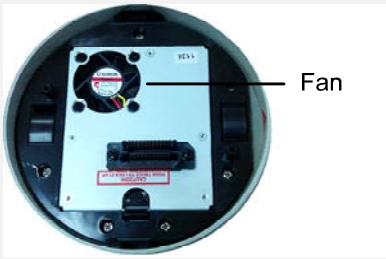
To replace the desiccant bags:

1. On the Top Housing, slightly press the black plastic socket backward and lift up the base board.



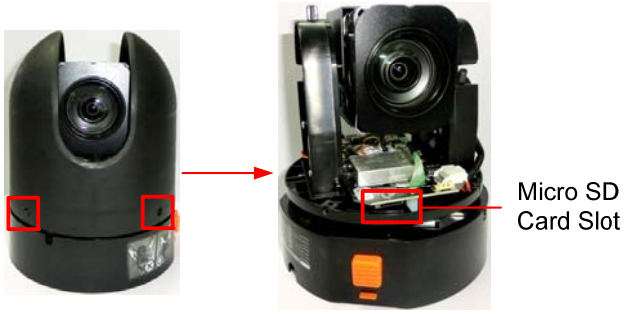
2. Remove the desiccant bags from the top housing.
3. Stick the supplied 3 new desiccant bags inside the top housing. Place back the base board.

Note: Ensure **Not** to place the desiccant bags under the position of the fan.



To insert a micro SD card:

1. Unscrew the four screws on the camera main body to remove the black housing.



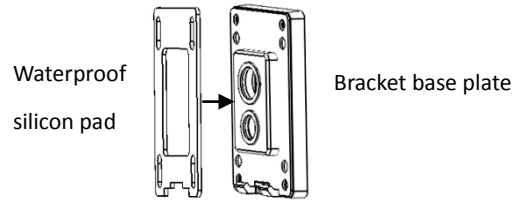
2. Insert the micro SD card to the card slot. Screw back the black housing.

Installing Outdoor Models (EPN4220d)

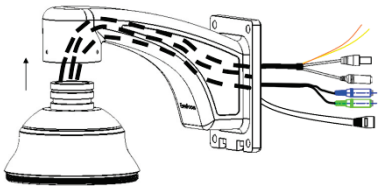
Two mounting types are available for the outdoor models: **Wall Mount** and **Ceiling Mount**.

Wall Mount

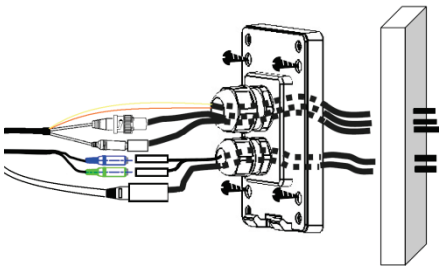
1. Drill 4 screw-depth holes for the bracket base plate and then drill a through-wall hole for the camera cables. You can optionally drill a second through-wall hole to separate cable feeding (see **Step 4**).
2. Attach the waterproof silicon pad to the bracket base plate for waterproofing.



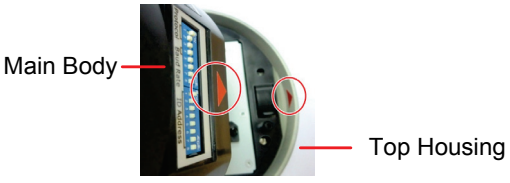
3. Feed the camera's cables through the conduit in the wall mount bracket.

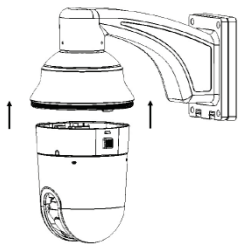


4. Connect the camera's cables to the related devices. Feed the cables of the related devices, such as the speaker, through the wall and then through the holes of the bracket base plate.



5. Screw the bracket base to the wall using the 4 screws.
6. Screw the wall mount bracket to the bracket base using the 4 long screws.
7. Put on the supplied gloves. Line up the red triangles ▲ and then push the main body upward to the top housing. Push the main body upward into the top housing until the orange catches on both sides click into position.





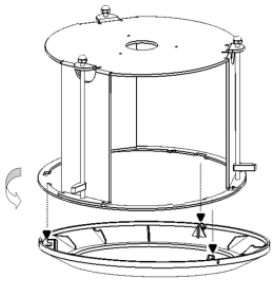
Note: To release the main body, press the two orange release buttons on both sides.

8. Screw the housing cover to the top housing slowly by twisting it clockwise.

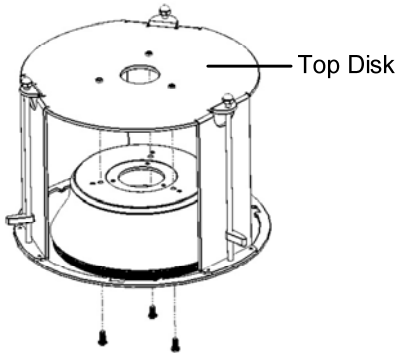
Ceiling Mount

It is required to use the optional Indoor Recessed Mount Bracket and Surface Ring to attach the camera to the ceiling.

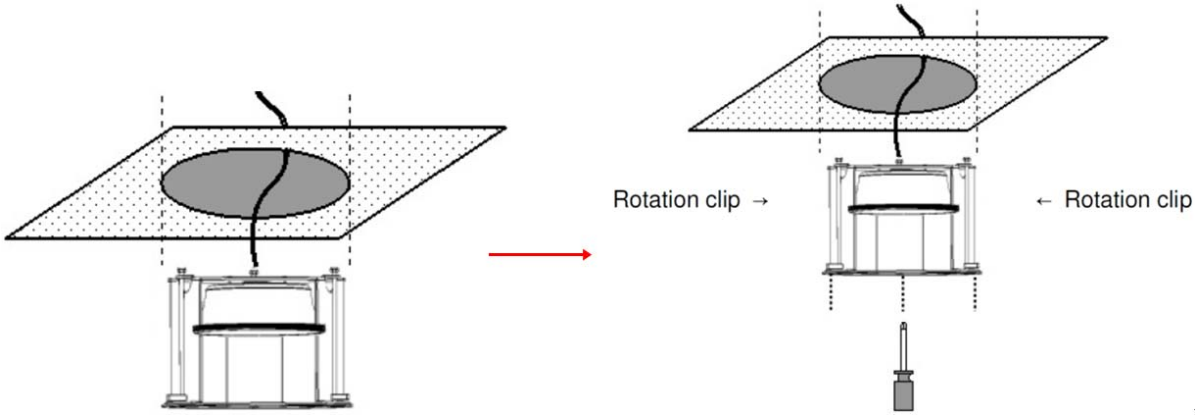
1. Cut a hole on the ceiling using the supplied template.
2. Slightly turn the surface ring and remove it from the bracket.



3. Place and then screw the camera's top housing on the top disk of the bracket using the 3 short screws.



4. Use a cable or other mechanism to hang the bracket on the ceiling. Screw the 3 rotation clips of the bracket on the ceiling using a screwdriver.



5. Put on the supplied gloves and then push the main body upward to the top housing. See **Step 7** in *Wall Mount*.
6. Screw the housing cover to the top housing slowly by twisting it clockwise.
7. Slide the surface ring to the fillister on the bracket.

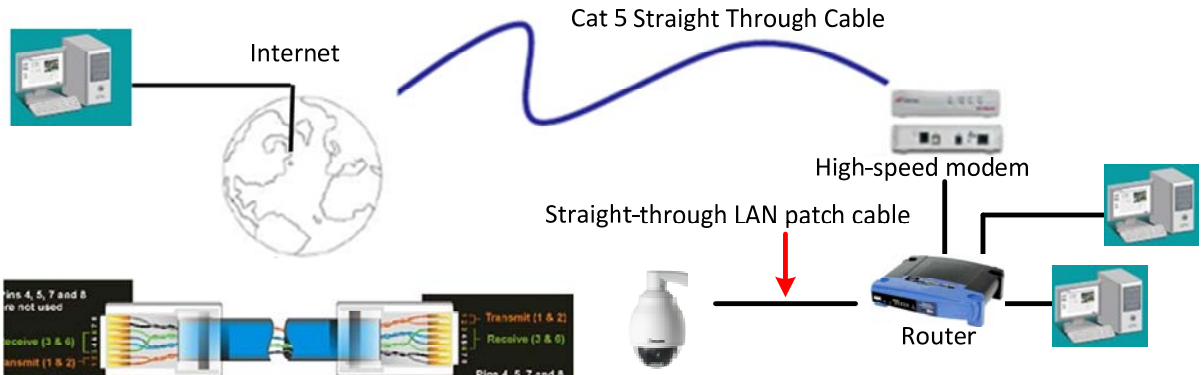
Note: When you turn on the power, the camera will enter self-inspection mode and run a self-testing program. Once this is complete, you will be able to operate it via any IP network.

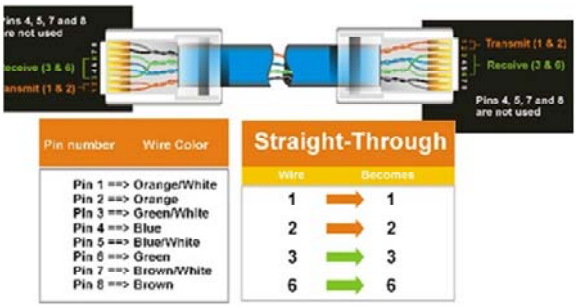
6. Network Connections

You can use one of the methods below to connect the camera to the network.

Router or LAN connection

This is the **most common connection** in which the IP camera is connected to a router and allows multiple users on and off site to see the IP camera on a LAN/WAN (Internet). The camera must be assigned an IP address that is compatible with its LAN. By setting up port forwarding on the router, you can view cameras from outside of the LAN via the Internet. To remotely access the Web interface of the IP camera, please refer to *7.3.2 DDNS* in the *User's Manual*. To set up port forwarding, please consult the manual of the router.

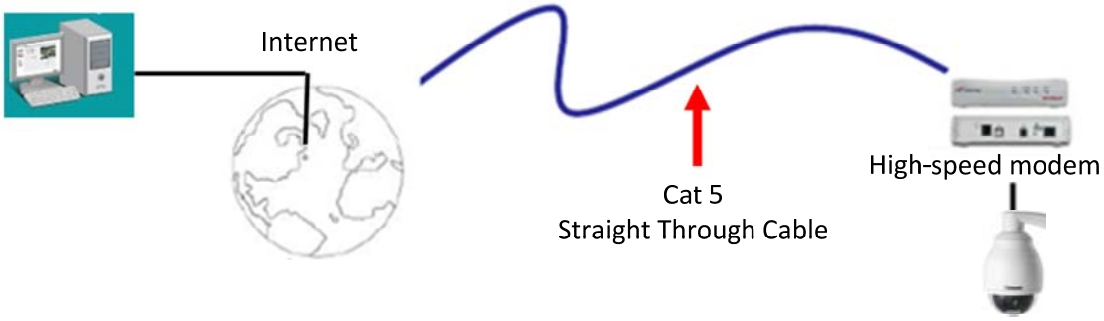




Left: Pinout of a straight-through cable.

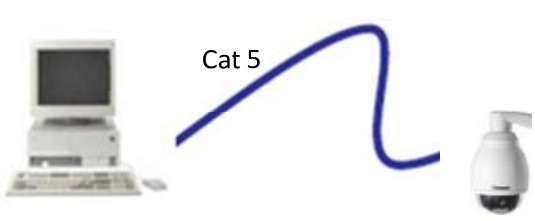
Direct High-Speed Connection

In a Direct High-Speed Connection, the camera connects directly to a modem without the need for a router. You need to set the static or dynamic WAN IP address assigned by your ISP (Internet Service Provider) in the camera's configuration web pages. To access the camera, just type "http://xxx.xxx.xxx.xxx", where xxx.xxx.xxx.xxx is the IP address given by your ISP. If you have a dynamic IP address, this connection may require that you use DDNS for a reliable connection. Please refer to *7.3.2 DDNS* in the *User's Manual*.

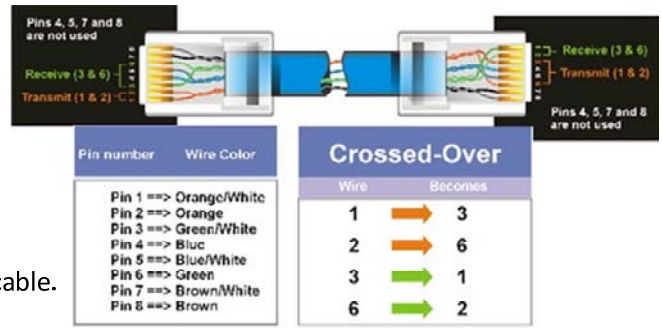


One-to-one Connection (Directly from PC to IP Camera)

You can connect directly without using a switch, router or modem. However, only the PC connected to the camera will be able to view the IP camera. You will also have to manually assign a compatible IP address to both the computer and the IP camera. Unless the PC has another network connection, the IP camera will be the only network device visible to the PC. See the diagram below:



Right: Pinout of a crossed-over cable.

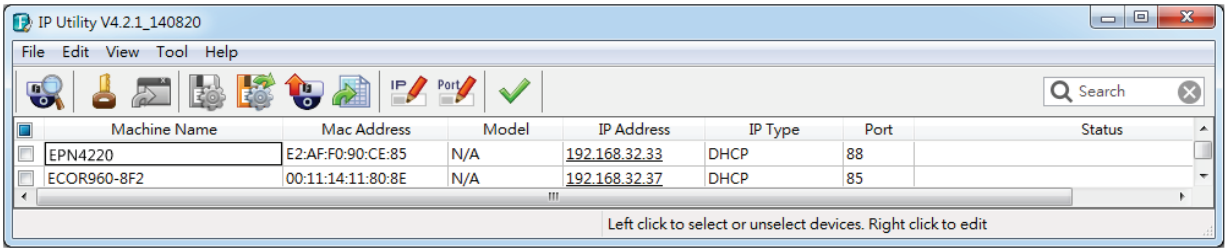


7. Checking the Dynamic IP Address

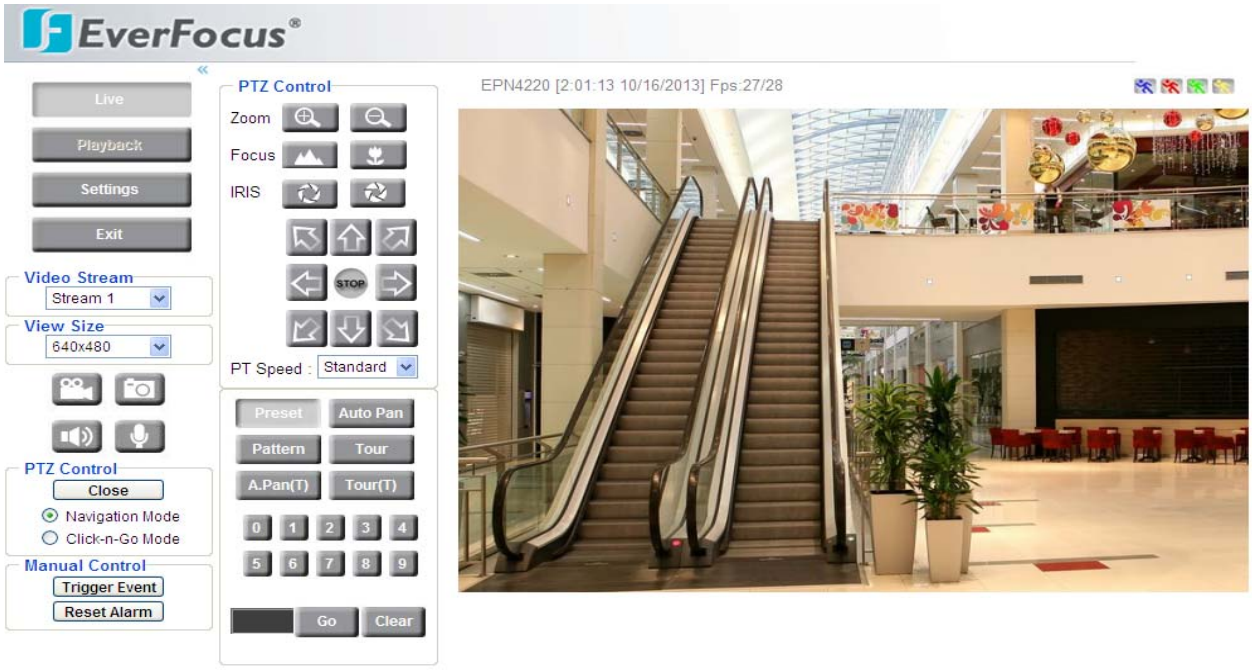
You can look up the IP address and access the Web interface of the camera using the **IP Utility (IPU)** software included in the software CD or from the Website of EverFocus (click here to download). Please connect the IP camera in the same LAN of your computer.

1. Save **IP Utility Setup AutoRun.exe** in your computer. Double click the **.exe** file and follow the on-screen instructions. Check **Run IPUtility.exe** and click the **Finish** button, the IP Utility will be launched to search the IP devices connected in the same LAN automatically.

Setup - IP Utility
Welcome to the IP Utility Setup Wizard
This will install IP Utility version 4.2.1 on your computer.
It is recommended that you close all other applications before continuing.
Click Next to continue, or Cancel to exit Setup.
Next >
Cancel


IP Utility V4.2.1_140820
File Edit View Tool Help
Search
Machine Name Mac Address Model IP Address IP Type Port Status
EPN4220 E2:AF:F0:90:CE:85 N/A 192.168.32.33 DHCP 88
ECOR960-8F2 00:11:14:11:80:8E N/A 192.168.32.37 DHCP 85
Left click to select or unselect devices. Right click to edit

2. Double click the IP address of the desired device, the login window pops up. Type the user ID and password to log in. By default, the user ID is **user1** and the password is **11111111**. Click **OK**, the Live View window appears.

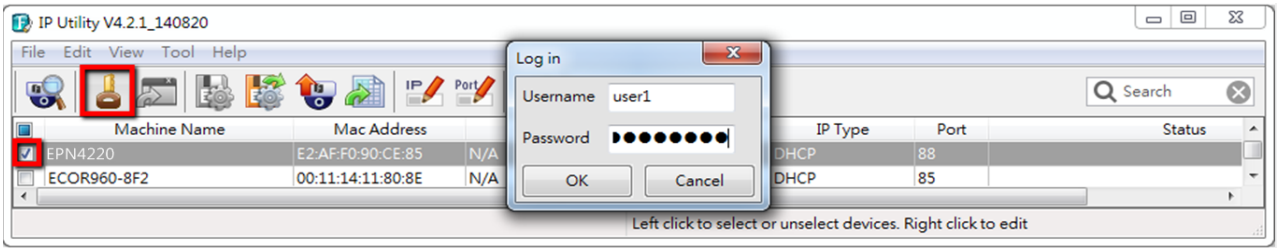


Note:

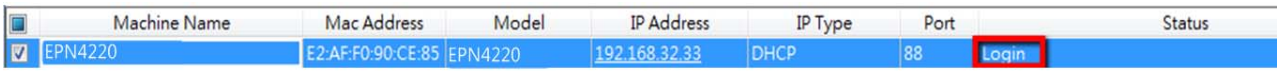
1. You might be required to download **ActiveX** for viewing the camera feed. If asked, click **Yes**.
2. To enable Remove Live View, Firmware Upgrade and ActiveX Prompt on Internet Explorer, some settings have to be complete. Please refer to *5.2 Settings for Microsoft Internet Explorer* in the *User's Manual*.

3. To optionally configure the Machine Name, IP Address, IP Type or Port Number using the IPU:

   a. Log in the camera by checking the desired model and then click the **Log in** icon. The Log in dialog box appears.



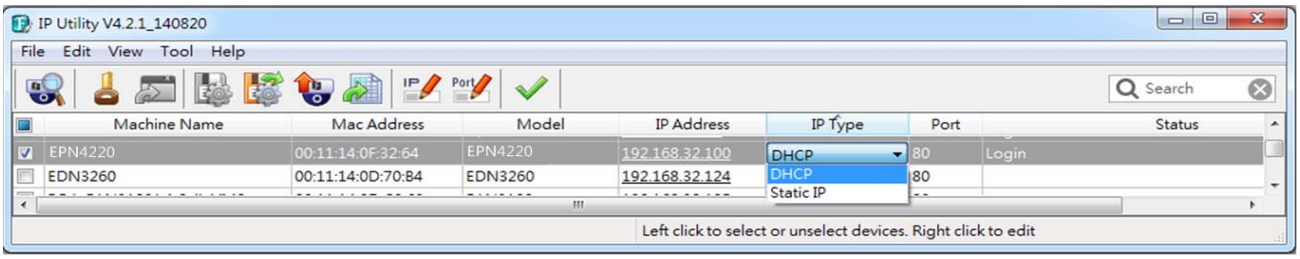
   b. Type the Username and Password. Click the **OK** button, the **Login** status displays.



Note:

1. The default user ID is **user1** and the default password is **11111111**.
2. If you select more than one camera that has the same user ID / password, you will be able to log in several cameras at once.

c. Right click the column to configure the settings. Click the **Apply Changes** button to apply and save the settings.

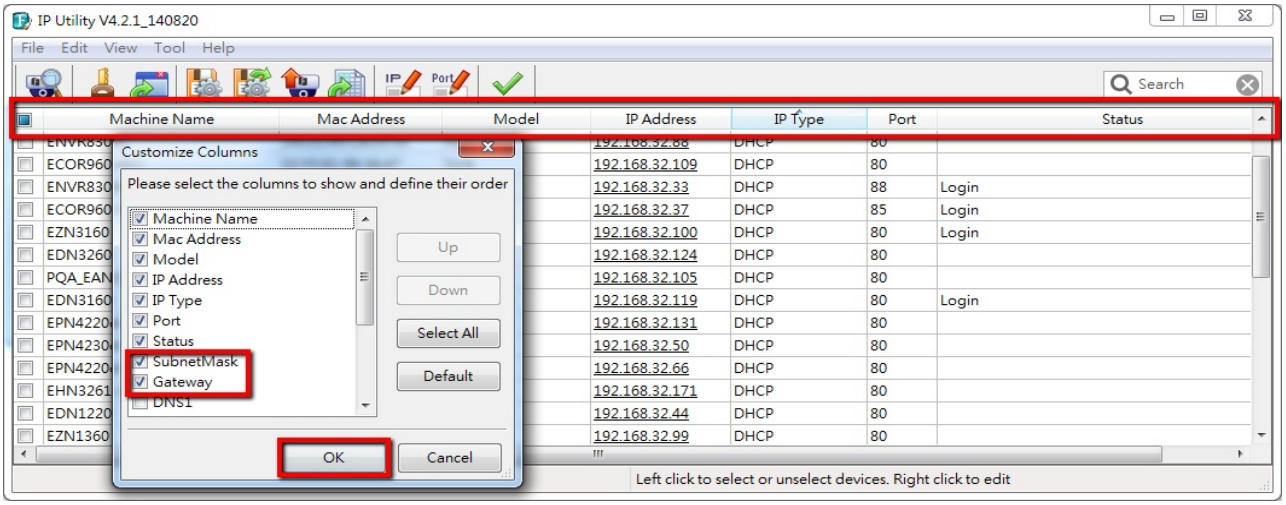


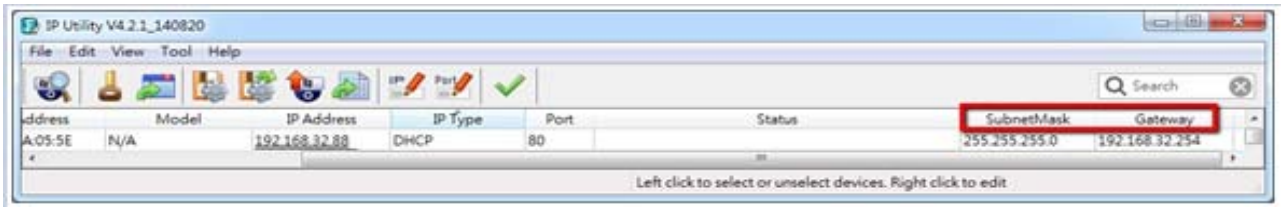
Note: Most networks uses DHCP to assign IP address, if you are unsure of your network settings, please consult your network administrators for configuration details.

To set up a static IP:

Select **Static** from **IP Type** drop-down list and set up the desired IP Address, for example, 172.17.0.145. Please also set up the Subnet Mask and Gateway. Click the **Apply Changes** button to apply and save the settings.

To show the Subnet Mask and Gateway items on the title bar, right click the title bar to display the **Customize Columns** window, select **Subnet Mask** and **Gateway** and then click **OK**.

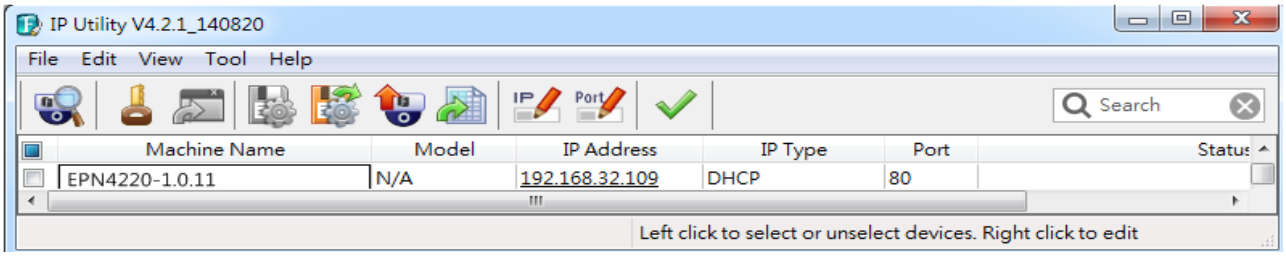




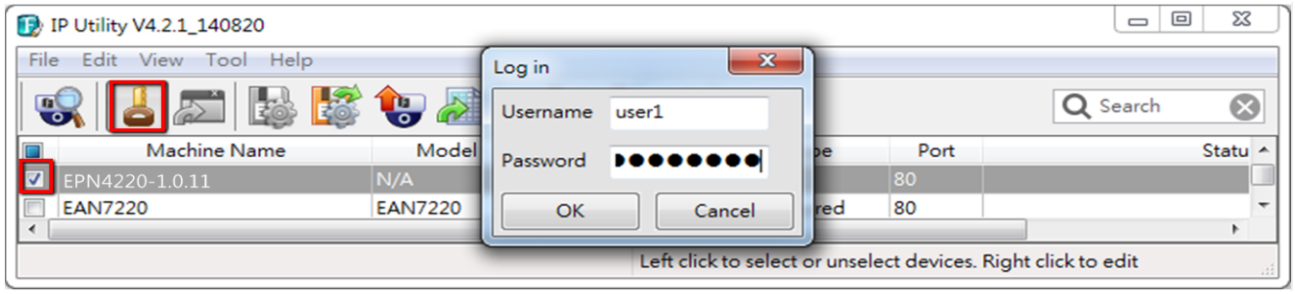
8. Upgrading Firmware

You can upgrade camera's firmware using the **IP Utility** software, which is included in the software CD or from the Website of Everfocus (click here to download).

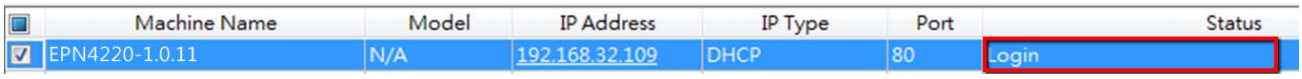
1. Install and then start the IPU program , the following IPU window appears. The IPU will automatically search the IP devices connected in the LAN.


IP Utility V4.2.1_140820
File Edit View Tool Help
Search
Machine Name Model IP Address IP Type Port Status
EPN4220-1.0.11 N/A 192.168.32.109 DHCP 80
Left click to select or unselect devices. Right click to edit

2. Log in the camera by checking the desired model and then click the **Log in** icon. The Log in dialog box appears.



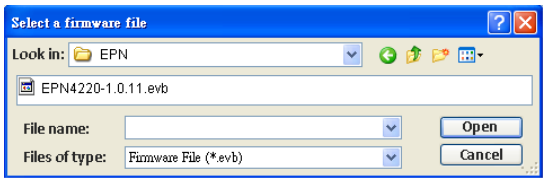
3. Type the Username and Password. Click the **OK** button, the **Login** status displays.



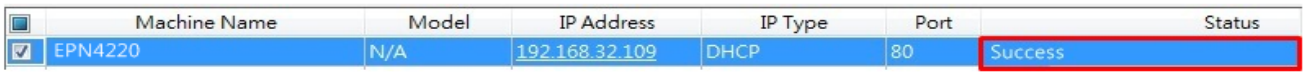
Note:

1. The default user ID is **user1** and the default password is **11111111**.
2. If you select more than one camera that has the same user ID / password, you will be able to log in several cameras at once.
3. Up to 10 cameras can be simultaneously upgraded to the latest firmware. If you connect the cameras to a PoE switch, please make sure the Power Consumption of the PoE switch is sufficient.

4. Click the **Upgrade Firmware** button , a browsing window appears.



5. Select the **firmware file (.evb)** and then click **Open**. The IPU will automatically upgrade the firmware. The camera will reboot once the upgrade process is complete.



EverFocus Electronics Corp.

EverFocus Taiwan:

12F, No.79, Sec. 1, Shin-Tai Wu Road,
Hsi-Chih, Taipei, Taiwan
TEL: +886 2 2698 2334
FAX: +886 2 2698 2380
www.everfocus.com.tw
marketing@everfocus.com.tw

EverFocus China - Beijing:

Room 609, Technology Trade Building,
Shangdi Information Industry Base,
Haidian District, Beijing 100085, China
TEL: +86 10 6297 3336~39
FAX: +86 10 6297 1423
www.everfocus.com.cn
marketing@everfocus.com.cn

EverFocus USA - California:

1801 Highland Avenue, Unit A, Duarte, CA 91010, USA
TEL: +1 626 844 8888
FAX: +1 626 844 8838
www.everfocus.com
sales@everfocus.com

EverFocus Japan:

3F, Kuramochi, Building II
2-2-3 Koto-Bashi, Sumida-Ku,
Tokyo, 130-0022, Japan
TEL: +81 3 5625 8188
FAX: +81 3 5625 8189
www.everfocus.co.jp
info@everfocus.co.jp

fneEverFocus India:

Suite 803, Housefin Bhavan, C-21,
Bandra Kurla Complex, Bandra (East),
Mumbai 400051, India
TEL: +91 22 6128 8700
FAX: +91 22 6128 8705
www.everfocus.in
sales@everfocus.in

EverFocus Europe - Germany:

Albert-Einstein-Strasse 1, D-46446
Emmerich, Germany
TEL: +49 2822 93940
FAX: +49 2822 939495
www.everfocus.de
sales@everfocus.de

EverFocus China - Shenzhen:

4F, No. 2, D4 Building, Wan Yelong
Industrial Park, Tangtou Road, Shiyan,
Baoan, Shenzhen, Guangdong 518101, China
TEL: +86 755 2765 1313
FAX: +86 755 2765 0337
www.everfocus.com.cn
marketing@everfocus.com.cn

EverFocus USA - New York:

415 Oser Avenue, Unit S, Hauppauge, NY 11788, USA
TEL: +1 631 436 5070
FAX: +1 631 436 5027
www.everfocus.com
sales@everfocus.com

EverFocus China - Shanghai:

Room 403, Ruijin Business Center, No.96, Zhaojiabang
Road, Luwan district, Shanghai 200020, China
TEL: +86 21 6471 2229 / 6471 2291
FAX: +86 21 6471 0566
www.everfocus.com.cn
marketing@everfocus.com.cn

Your EverFocus product is designed and manufactured with high quality materials and components which can be recycled and reused.
This symbol means that electrical and electronic equipment, at their end-of-life, should be disposed of separately from your household waste.
Please, dispose of this equipment at your local community waste collection/recycling centre.
In the European Union there are separate collection systems for used electrical and electronic product.
Please, help us to conserve the environment we live in!

Ihr EverFocus Produkt wurde entwickelt und hergestellt mit qualitativ hochwertigen Materialien und Komponenten, die recycelt und wieder verwendet werden können.
Dieses Symbol bedeutet, dass elektrische und elektronische Geräte am Ende ihrer Nutzungsdauer vom Hausmüll getrennt entsorgt werden sollen.
Bitte entsorgen Sie dieses Gerät bei Ihrer örtlichen kommunalen Sammelstelle oder im Re Centre.
Helfen Sie uns bitte, die Umwelt zu erhalten, in der wir leben!

EverFocus®

P/N: 4605PP4220B022B